handle unbundled network elements has slowly evolved, the capability to order line sharing can be developed.[84]

Some carriers, despite their protestations that OSS implementation of line sharing is infeasible, appear eager to deny the benefits of line sharing by increasing its costs when it is implemented. SBC, GTE and Bell Atlantic have already moved past the question of whether it can be done and on to who will pay for it. In order to mitigate the benefit competitive LECs will gain from line sharing, carriers like GTE and Bell Atlantic suggest that the cost of the "significant" upgrades should be "subtracted from any benefits identified by [line sharing.]"[85] OSS line sharing capability should not be treated any differently than access to other OSS, and competitive LECs who order line sharing should be charged the same rates as any other facilities-based competitive LECs for OSS implementation and development costs.

D. Commission Rules Regarding Line Sharing Pricing Will Ensure Proper Incentives

1. National Pricing Rules

As both state commissions and competitive LECs recognized in their comments, national pricing rules for line sharing are essential to ensure the prompt development of competition in residential DSL services. Further, the pricing rules proposed by

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[84] Indeed, the Oklahoma Corporation Commission states that OSS tracking of shared facilities is already being addressed and can be accommodated to include line sharing. Comments of Oklahoma Corporation Commission at 17.

[85] Comments of Bell Atlantic, Jackson Statement ¶ 14.

NorthPoint and other competitive LECs will also address the cost allocation concerns raised by incumbent LECs.

The views of the state agencies that filed comments on line sharing -- the Oklahoma Corporation Commission, the People of the State of California and the Public Utilities Commission of the State of California -- underscore the importance of national rules. California argues that FCC cost and pricing are needed because "only a consistent national approach to pricing will allow line sharing to develop fully in the market place."[86] Similarly, Oklahoma argues that the Commission should develop a "template" with clear standards and rules for pricing and cost allocation.[87]

Intermedia Communications, Inc., Rhythms Netconnections, Inc., and Covad Communications Company also urge the adoption of a national pricing standard.[88] In particular, Intermedia stresses that a definitive ruling by the Commission with respect to pricing for line sharing is vital.[89] Given this record, and in particular the recommendations of the two state commissions that addressed this issue, the Commission should adhere to its conclusion in the *Local Competition First Report and Order* that

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[86] Comments of the State of California and the Public Utilities Commission of California at 8.

[87] Comments of Oklahoma Corporation Commission at 19.

[88] Comments of Intermedia Communications Inc. at 4-5; Comments of Rhythms NetConnections at 12-14; Comments of Covad Communications at 39.

[89] Comments of Intermedia Communications at 4-5.

national rules will promote competition and assist smaller entities that seek to provide competitive service.[90]

With respect to the nature of the national pricing rules, there is also a fair degree of agreement among commenters that addressed this question. Commenters generally advocate that the Commission continue to use a cost-based methodology that reflects forward-looking costing principles, such as TELRIC,[91] and also include a nondiscrimination principle, so that prices for access to a shared-line UNE do not exceed the costs set forth in the incumbent LECs' DSL tariffs.[92] Adoption of a national pricing rule that incorporates these elements is reasonable and procompetitive as a matter of economic policy, and if NorthPoint's specific proposal is implemented, it would be relatively simple to administer, and thus would facilitate the implementation of line sharing.

2. Cost Allocation

Adoption of a national rule that incorporates a forward-looking cost methodology with a nondiscrimination principle addresses the cost allocation concerns raised by incumbent LECs. Bell Atlantic, for example, attaches an affidavit by Robert W.

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[90] *Local Competition First Report and Order* at ¶ 61.

[91] *See, e.g.,* Comments of The State of California and the Public Utilities Commission of California at 7; Comments of Intermedia Communications at 4; Comments of Covad Communications at 39.

[92] *See, e.g.,* Comments of Covad Communications at 39; Comments of Network Access Solutions at 15-16; Comments of MCI WorldCom at 13.

Crandall, which states that line sharing creates a problem of allocating the common costs of a fixed facility among two or more different services.[93]

Dr. Crandall is correct in stating that there are difficulties in allocating common costs in the sense that there is no way, as a matter of economics, to allocate common costs on a cost-causative basis. However, regardless of the basis (*e.g.*, elasticities of demand) used to allocate common costs, the allocation should be nondiscriminatory so that incumbent LECs and competitive LECs face the same price for the use of the same capability. Incumbent LECs allocate common costs among services already; indeed they must allocate the common cost of the loop among voice and DSL services. The pricing approach described by NorthPoint in its comments addresses the difficulty identified by Dr. Crandall and others by avoiding the need for the Commission to undertake a cost allocation proceeding. In fact, NorthPoint's solution adopts Dr. Crandall's views by having the Commission rely on the incumbent LECs' pre-existing internal cost allocations as reflected in the cost support for their retail DSL tariffs.[94]

3. Pricing Levels

The affidavit of Alfred E. Kahn attached to the comments of Bell Atlantic makes the remarkable statement that "even if the unbundling demanded entailed zero

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[93] Comments of Bell Atlantic, Affidavit of Robert W. Crandall at ¶ 22. *See also* Comments of AT&T at 19; Comments of BellSouth at 25.

[94] *See* Crandall Affidavit at 22 ("An unregulated carrier will develop its own algorithm for allocating these costs depending on its views on the nature of demand for the services and the availability of substitutes.").

incremental costs, it would decidedly *not* be conducive to efficient competition for that 'UNE' to be priced at that level."[95] If the incremental cost of line sharing *is* zero and that is the cost that incumbent LECs use in the tariff cost support for their retail DSL prices, efficiency requires that all competitors, including the incumbent LECs, face the same prices for the use of the same inputs.

For the reasons described above and in NorthPoint's Comments, the only way to have competition for customers that desire DSL and voice on the same line is to price line sharing to competitors at the same level that the incumbent charges itself. If this is not the case, competitors will face artificially higher costs than the incumbent and be forced to make contributions to cover common costs while the advanced service operations of the incumbent get a free ride.

In other contexts, Professor Kahn has argued forcefully that advanced services should recover only the incremental costs associated with the particular service and bear none of the costs common to voice services and video services.[96] However, it appears that incumbent LECs' argument is that *competitors* should bear common costs whereas the incumbents should not. To promote efficient competition, either both should

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[95] Comments of Bell Atlantic, Affidavit of Alfred E. Kahn at 15, n. 28.

[96] See Letter from Alfred E. Kahn to Mr. William Caton, Acting Secretary, Federal Communications Commission, July 19, 1996, CC Docket No. 96-112, *Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services* (arguing that incumbent LECs should be free not to allocate any of the common costs of the network to video services).

contribute or neither should. Any other construct will create artificial inefficiencies favoring the incumbent and harming consumers.

Dr. Crandall and Professor Kahn also argue that line sharing could deprive incumbent LECs of revenues needed to support voice service because voice retail rates are below cost.[97] Nothing about the introduction of line sharing affects the ability of incumbent LECs to recover costs associated with providing retail voice service.[98] To the extent that monthly retail voice revenues do not recover costs, incumbent LECs have been able to recover those costs through other services, including intraLATA toll and intrastate and interstate access charges.[99] DSL service has been introduced by incumbent LECs only in the last twelve months, and before its introduction, incumbent LECs had healthy rates of return on their voice services. While incumbent LECs may be concerned that competition for residential DSL may mean that some residential customers take service from competitors, there has been no showing (and there is no reason to expect) that line sharing will have any effect on the ability of incumbents to recover costs associated with providing retail voice services.

Congress has concluded that universal service subsidies should be explicit and

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[97] Comments of Bell Atlantic, Affidavit of Robert W. Crandall at ¶¶ 18-19; Affidavit of Alfred E. Kahn at ¶¶ 17-18.

[98] Kahn has argued elsewhere that shareholders should bear the risk and reap the return from the introduction of advanced services. As a result, he argues the rates for regulated voice services should be unaffected by the offering of advanced services.

[99] *Federal State Joint Board on Universal Service*, Report and Order, CC Docket No. 96-45, 12 FCC Rcd 8776, 8784 (1997) (*Universal Service Order*).

competitively neutral and the Commission has adopted a plan for implementing that requirement.[100] Professor Kahn and Dr. Crandall argue that retail voice rates are insufficient to cover costs. If this is true, the solution is to use the universal service system, not to tax competitors' use of unbundled network elements. The Commission has already rejected the "tax the competitors" argument in the *Local Competition Order.*[101] Bell Atlantic's arguments are, in effect, an attempt to maintain an implicit, incumbent LEC-only, subsidy system that will frustrate competition for DSL subscribers. Because competitors would have to pay a higher price for one of the building blocks for DSL service, even if they are more efficient than the incumbent LECs at providing the service, they will not be able to compete, therefore denying consumers the benefits of efficiency and competition.

In his discussion of the recovery of costs associated with retail voice service, described above, Dr. Crandall also argues that line sharing would create a situation in which the provision of voice service would not be economically remunerative to the competitive LEC, and would therefore create disincentives for competitive LEC competition for residential voice customers. The traditional sources of making up any gap between voice retail revenues and costs, including access charges and toll, are also available to competitive LECs. Therefore it seems unlikely that line sharing would have an effect on incentives to serve voice customers. As NorthPoint has previously explained

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[100] 47 U.S.C. § 254 (d)-(e); *Universal Service Order*, 12 FCC Rcd 8776.

[101] *Local Competition First Report and Order* at ¶ 712.

in its Comments, its business plan is DSL-only because it is NorthPoint's experience that it is much easier to convince a customer to take a new service (*e.g.*, DSL) than to switch service providers for an existing service (*e.g.*, voice).[102] Furthermore, as described above, it is NorthPoint's view that competition for residential DSL creates a path to additional competition for residential voice services. In the future, as the competitive playing field for voice services is more attractive and as customers become more accustomed to the quality of service from competitive LECs, competitors will be much more likely to provide the full bundle of services.

E. The Commission Has Jurisdiction and Should Implement Line Sharing Promptly

As NorthPoint stated in its Comments, the Commission has jurisdiction to implement line sharing under at least two independent legal theories: under expanded interconnection as special access and as an unbundled network element. The Commission should adopt line sharing under both of these theories, and should also create incentives for incumbent LECs to implement line sharing promptly and in a way that advances the Commission's policy objectives.

Incumbent LECs advance two arguments in support of their claim that line sharing is not an unbundled network element: (1) line sharing does not meet the statutory definition of a network element; and (2) the absence of line sharing would not "impair"

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[102] Comments of NorthPoint at 15.

competitive LECs' ability to offer DSL. Neither argument is persuasive, as we show below.

GTE argues that loop spectrum does not fall within the definition of "network element" because it is not a facility or equipment, nor is it a feature, function, or capability of the loop.[103] As NorthPoint, Sprint, Network Access Solutions and Covad stated in their Comments, the transmission frequencies above those used for analog voice services on any loop are a capability of that loop, and fall within the definition of a network element.[104] Even if line sharing is a new concept, the Commission has correctly stated that the Act should be read in a manner that accommodates changes in technology and the promotion of competition. The identification of the higher transmission frequencies as a "capability" is consistent with the plain meaning of the word, and furthers the policy goals identified by the Commission.

In the *Local Competition First Report and Order*, the Commission rejected incumbent LEC arguments for a rigid interpretation of the definition of "network element," and instead adopted a more flexible approach. The Commission concluded that it should identify a particular facility or capability as a single network element, but allow itself and state commissions the discretion to further identify, within that single facility or capability, additional required network elements.[105] The Commission observed that

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[103] Comments of GTE at 18.

[104] Comments of NorthPoint at 26; Comments of Sprint at 8 n. 2; Comments of Covad Communications at 19; Comments of Network Access Solutions at 9.

[105] *Local Competition First Report and Order* at ¶ 259.

allowing elements to be further subdivided into additional elements would allow its rules to accommodate changes in technology and would better serve the goals of the 1996 Act.[106] Thus, the Commission's statement of the policy framework for establishing network elements, including the subdivision of existing elements, supports the identification of line sharing as an additional network element, even given the availability of the loop unbundled network element. Moreover, the Commission's rationale that such an approach would better accommodate changes in technology supports the idea that the Commission can and should define network elements that were not contemplated by the drafters of the 1996 Act, simply because the technology (*e.g.,* DSL) was not widely known at the time.

Other incumbent LECs, while apparently conceding that the higher transmission frequencies may be regarded as a network element, nevertheless argue that the lack of availability of the element would not "impair" the ability of competitive LECs to offer DSL service. As stated in NorthPoint's Comments, and amplified above in our Reply Comments, without access to line sharing, competitive LECs will be unable to offer DSL service to residential customers.[107] In the absence of line sharing, competitive DSL LECs must use a second, stand-alone loop to serve end users. Such second loops are increasingly scarce and, even when available, sufficiently costly to push the price of

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[106] *Id.*

[107] Comments of NorthPoint at 6-13, 27-28. *See also* Comments of Sprint at 8, 15; Comments of Commercial Internet Exchange Association at 2-3; Comments of MCI WorldCom at 11; Comments of Rhythms NetConnections at 7.

competitive LEC DSL services out of the reach of the consumer market. Requiring incumbent LECs to permit line sharing will lower loop costs for DSL competitive LECs and permit residential competition to flourish.

Some commenters also argue that the Commission has previously rejected arguments that the loop should be unbundled for multiple carrier use, citing paragraph 385 of the *Local Competition First Report and Order.*[108] In that paragraph, the Commission addressed the arguments made by interexchange carriers that wished to lease part of the loop solely for the provision of interexchange services. As SBC recognizes,[109] these interexchange carriers were requesting that the loop be time-shared, so that whenever the end user was making a long distance call, the interexchange carrier would control the loop, and whenever the end user was making a local call, the local exchange carrier would control the loop. The Commission properly concluded that such treatment was inappropriate. The issue before the Commission at this time is different. NorthPoint and other competitive LECs wish to share the loop on a physical, rather than temporal, basis. NorthPoint wishes to have exclusive control at all times over the transmission frequencies above those required for analog voice service. The adoption of line sharing thus would not be inconsistent with the Commission's previous rejection of time-sharing.

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[108] *See, e.g.,* Comments of SBC at 18.

[109] Comments of SBC at 18, n. 19.

F. Without Enforcement And Incentives, Incumbent LECs Will Deprive Consumers Of The Benefits Of Line Sharing Indefinitely

The Commission's experience with efforts to introduce competition suggest that incumbent LEC implementation of Commission rules designed to facilitate competition with incumbent LECs is likely to be pursued more quickly and diligently if the incumbent LECs have an incentive to comply with these rules, and if the FCC swiftly enforces compliance. In order to ensure that line sharing is implemented promptly and in a way that fosters competition, the Commission should establish an incentive and enforcement structure that will promote incumbent LEC compliance. For example, it is not enough that the Commission conclude that line sharing is an unbundled network element; the Commission should also state that compliance with the Commission's line sharing rules will be considered in the evaluation of whether the Bell Operating Company is in compliance with Section 271(c)(2)(B)(ii), which requires nondiscriminatory access to network elements.[110]

Under either the unbundled network element theory or the special access theory, the Commission should also give incumbent LECs a limited amount of time to implement line sharing. The Commission should adopt a variety of remedies to ensure that the schedule is met.

First, during the time that line sharing is not available, running from the effective date of the order, incumbent LECs should be required to establish a surrogate charge for

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[110] 47 U.S.C. § 271(c)(2)(B)(ii).

loops for DSL service, as described in the SBC and Ameritech proposed conditions for approval of their merger application.[111] In this case, the surrogate loop charge, pending implementation of line sharing, would be 50% of the lowest recurring charge.

Second, the Commission should propose and adopt a simple and easily administered scheme for imposing monetary penalties on incumbent LECs for each day after the deadline passes that line sharing is not available in the form prescribed by the Commission. This will give incumbent LECs an incentive to speed the availability of line sharing.

Third, in extreme circumstances, when the incumbent LEC has been given multiple warnings, the other remedies are in place, and line sharing is still not available, the incumbent LEC should be precluded from adding new DSL customers.

II. SPECTRUM POLICY

There is general consensus among the commenting parties that the T1E1 telecommunications committee should not be vested with the authority to develop and implement spectrum policy. BellSouth "vigorously opposes" any notion that T1E1 be vested with setting binder management policies.[112] ALTS urges the FCC to set and enforce spectrum policy to ensure that the pro-competitive and pro-innovation goals of the Act are realized.[113] AT&T suggests that T1E1 might be adequate *but for* its failure to

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[111] SBC/Ameritech Proposed Merger Conditions in CC Docket No. 98-141, at ¶ 34.

[112] Comments of BellSouth at 30-31.

[113] Comments of ALTS at 22.

adhere to articulated FCC goals or to use "reasonable" assumptions relating to advanced services deployment.[114] U S West concedes that T1E1 is not a "viable policymaking body."[115] The General Services Administration, on behalf of United States Agencies that use telecommunications services, notes that existing industry fora are dominated by their incumbent LEC and electronic equipment manufacturer "hosts" and urges the FCC "to assume the role of final arbitrator by exercising the right to approve or reject standards with notice and comment by all concerned parties."[116] MCI/WorldCom strongly urges the FCC to ensure that spectrum policy serves national pro-competitive goals and not to permit T1E1 to usurp that authority.[117] Both Oklahoma and Texas urge the FCC not to relegate its role to T1E1.[118] Sprint would tolerate T1E1 participation only in an advisory role.[119]

The opposition to permitting T1E1 to usurp the Commission's role in setting spectrum policy is both broad and well-founded. Despite T1E1's assertion that it is not dominated by any single interest,[120] it has consistently pursued policies that favor its legacy incumbent LEC members and that tilt toward monopoly policies. It is

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[114] Comments of AT&T at 11-12.

[115] Comments of U S West at 7.

[116] Comments of GSA at 5.

[117] Comments of MCI/WorldCom at 3.

[118] Comments of Oklahoma Corporation Commission at 6; Comments of Public Utilities Commission of Texas at 3.

[119] Comments of Sprint at 2.

[120] Comments of the Alliance for Telecommunications Industry Solutions, Inc. (ATIS) at 6.

institutionally biased towards limiting innovation in favor of sustaining existing, often outdated, technologies. Its analytical methodologies – deferring to "worst case" interference assumptions that bear no relation to actual deployment – today serve to undermine greatly the benefits of competition by thwarting innovation and curtailing the reach of new services. Because of its monopoly-era approach to selecting technologies and applying "worst case" scenarios, T1E1 is ill-suited in its present form to serve as a principal arbiter of pro-competitive spectrum policy.

Already T1E1's spectrum activities are being employed by the incumbent LECs to thwart the benefits of competition in broadband advanced services. Indeed, several carriers are already "incorporating" T1E1's *draft* spectrum policies to impose upon new entrants limitations in the deployment of advanced services that already are both widely deployed and "successfully deployed." Southwestern Bell has attempted to compel competitive LECs to execute agreements that would curtail the deployment of high-bit-rate advanced services in a manner that is unnecessary, but defers to T1E1 drafts.[121] In response to requests for contract amendments to permit NorthPoint to obtain DSL-capable loops (as ordered by the Commission in August 1998), Ameritech would have

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[121] *See* Proposed Interconnection Agreement of Southwestern Bell Telephone, Project No. 16241, filed May 13, 1999, Attachment 25 (SWBT unbundled DSL capable loop offerings limited to loops that are "approved" by T1E1.4 spectrum compatibility draft guidelines and "selected" ANSI contributions that are under study). While SWBT also proposed a method for creating additional "loop types" for other "non-standard" technologies, the imposition of "loop types" on competitive LEC services is unnecessary, burdensome, and creates a situation ripe for discrimination.

required NorthPoint to waive its right to deploy high-speed symmetric DSL based on unapproved T1E1 guidelines and in direct conflict with the Commission's interim rule to allow "successfully deployed" services.[122]

Some carriers continue to resist *any* limits on their prerogative to thwart competitors under the banner of "spectrum management." In proposed interconnection language relating to DSL loops given to NorthPoint, GTE "reserved the right" to *deny* competitive LECs the ability to deploy new digital services if GTE thinks that it *might* deploy other services within a six month period – delaying competitive entry, harming

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[122] Ameritech proposed to make available to NorthPoint DSL capable loops subject to limiting conditions that were inconsistent with the FCC's March spectrum rules. For example, in its June 21, 1999, proposal, Ameritech offered a DSL loop only on condition that NorthPoint *not* deploy high-speed (1.0 and 1.5 mbps) SDSL that is not a T1E1 "approved" technology but has been successfully deployed nationwide.

> "2-Wire Mid-Rate SDSL-Like Compatible Unbundled Local Loop" or "2-W MRS" is a transmission path which supports the transmission of a digital signal ***up to 768 Kbps*** over a two-wire, nonloaded twisted copper pair. *Equipment placed by the Requesting Carrier must conform to the Power Spectral Density (PSD) template shown in Table 3 and Figure 4 as currently proposed in the ANSI T1.E1 Committee Spectrum Management Standards Draft No. 9E140023 ("T1-E1 Draft") and as represented in the table set forth below.* (Emphasis added).

consumers, and flouting the Commission's rules all in one paragraph.[123] Indeed, GTE contends in its comments that the Commission has no authority to implement pro-competitive spectrum policy and that GTE would, consistent only with T1E1, "write its own" spectrum rules into interconnection agreements as they arise.[124]

Given incumbent LECs' failure to abide by the Commission's March 1999 order to permit continued provision of "successfully deployed" technologies, and their continued attempts to thwart innovation by retreating to T1E1 guidelines as a means of constraining competitive LEC services, it is essential that the Commission act immediately and forcefully to establish national spectrum policy that balances appropriately the goals of the Act: facilitating advanced services deployment, investment and innovation, while protecting against significant degradation of other existing services.

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[123] GTE DSL Loop Proposal dated June 14, 1999:

> (¶5.6) If **CLEC plans to deploy service enhancing technologies (e.g. ADSL, HDSL, ISDN, etc.) over unbundled copper loops that *could potentially interfere* with [as opposed to cause actual and significant degradation to] other service enhancing technologies that may be deployed within the same cable sheath, **CLEC is responsible for notifying GTE of its intent. GTE will determine if there are any existing or planned service enhancing technologies deployed within the same cable sheath that would be interfered with if **CLEC deployed the proposed technology. If there are existing service enhancing technologies deployed or in the process of being deployed by GTE or other CLECs, or if GTE has existing near term plans (within 6 months of the date of facility qualification) to deploy such technology, GTE will so advise **CLEC and **CLEC shall not be permitted to deploy such service enhancing technology. If **CLEC disagrees with GTE's determination, the Parties will jointly review the basis for GTE's decision and attempt to mutually resolve the disagreement.

[124] Comments of GTE at 12.

A. T1E1's Proposed Spectrum Guidelines Would Defeat Innovation and Are Contrary to Federal Policy

1. T1E1 Has Arrogated The Role of Choosing "Winners" and "Losers" in the Race to Deploy New Technologies

In its initial comments, NorthPoint indicated that T1E1 is an inappropriate repository for the development of national spectrum policy or the implementation of that policy.[125] Since the opening comments in this proceeding on June 15, 1999, actions by T1E1 have underscored NorthPoint's original concerns. The proposed draft, "Spectrum Management for Loop Transmission Systems," (T1E1.4/99-002R4), specifies "winning" and "losing" technologies among those already deployed in the loop plant. Using assumptions and measurements for possible interference that bear almost no relation to actual deployment, the proposed draft imposes limitations on "losing" technologies that would result in the rollback of existing, deployed services and constrain further innovation and advanced service deployment. This proposed draft is inconsistent with the Commission's determination in the March 1999 *Advanced Wireline Services* order that any technology that has been successfully deployed without significantly degrading the performance of other services should be presumed acceptable for deployment.[126]

In its latest draft spectrum guidelines, T1E1 sets out to dictate to the nation's telecommunications consumers which technologies they may, and may not, receive. As a

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[125] Comments of NorthPoint at 42-46.

[126] *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability*, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 98-147, at ¶ 67 (released March 31, 1999).

premise for its analysis of spectrum compatibility issues, T1E1 has already picked the winners and losers in the race to innovate and deploy advanced services. Its mission, T1E1 states, is to "guard" certain incumbent LEC technologies and constrain others.

> This standard [for spectrum policy] defines certain *guarded loop* services and technologies. Guarded systems are defined as loop transmission systems with which the DSL spectrum management classes defined in this standard, and other new loop transmission systems, are *required to demonstrate spectral compatibility.*[127]

By picking, from the start, "guarded" and "unguarded" technologies, and setting out to limit those "unguarded" services, T1E1 is effectively depriving the Commission of the ability to establish spectrum policy in a manner to further Commission's goals of nondiscrimination and consumer choice.

T1E1's decision to choose certain "winners" and "losers" among advanced technologies is also biased toward incumbent LEC preferences and appears inconsistent even with T1E1's stated standard. T1E1 defines guarded systems as those "that have been deployed in high numbers as well as standards-based DSL systems that are *expected* to be deployed in high numbers in the near future."[128] Under this standard, competitive LEC offerings like NorthPoint's SDSL, which already are deployed in dozens of cities across the nation and enjoyed by thousands of users, should surely be included. Incumbent LEC supported services, like extraordinarily high-bit rate ADSL – at rates exceeding 5.0 megabits per second – which are neither widely deployed nor, because of

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[127] T1E1.4/99-002R4 Spectrum Management for Loop Transmission Systems ("T1E1 Draft Guidelines") at 8, ¶ 4.3.1

[128] T1E1 Draft Guidelines at 8, ¶ 4.3.1.

severe distance limitations and the evolution of the superseding G.Lite (1.5 mbps) ADSL standard, never will be, should not earn "guarded" status.[129] Nevertheless, T1E1 has designated high-bit-rate ADSL as "guarded" and has set out to determine the constraints that should attach to the competitive LECs' deployment of "unguarded" SDSL services. By picking "winners" and "losers," and by doing so in a manner that is consistently biased in favor of incumbent LECs, and inconsistent with its own definitions, T1E1 reveals that it is unsuitable as a repository for the development or implementation of the Commission's pro-competitive, pro-innovation spectrum policies and standards.

2. T1E1 Uses Analytical Models That Are Unnecessarily Restrictive And Harm Consumer Choice

In addition to picking "winners" and "losers," T1E1 uses assumptions and interference models that exacerbate the anti-competitive effects of its policies by unduly constraining new technologies. As NorthPoint and AT&T[130] previously indicated, T1E1's hyper-conservative interference assumptions would cause certain technologies to be needlessly constrained in deference to other "guarded" technologies. Thus, for example, the T1E1 Draft Guidelines start with an assumed "crosstalk environment" that is statistically impossible to achieve.[131] Indeed, these assumptions completely fail to account for the fact that some services, like SDSL, are deployed in commercial centers

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[129] *See* Comments of NorthPoint at p. 40, n. 64.

[130] Comments of AT&T at 6 (must permit limited spectral interference") and at 11-12.

while others, like ADSL, are typically residential, and the resulting fact that CPE interference between the two is a near impossibility. T1E1 assumes that these services will be widely deployed to the same end-user address and result in high levels of cross-talk at the end-user location.[132] Consequently, by applying "worst case" instead of "real case" assumptions, T1E1 would cause NorthPoint and others to terminate end-user high-speed symmetric DSL services that are already being enjoyed today without having caused *any* interference, let alone significant degradation, to other advanced technologies. NorthPoint and others urged T1E1 to modify these assumptions to ensure the broadest possible deployment of advanced services in the network, but T1E1 rejected the proposed modifications.[133]

T1E1's overly conservative assumptions deny rural consumers the benefits of broadband DSL. In order to protect against the possibility of interference of "guarded" technologies, "unguarded" technologies would be forced to constrain power, even if the "guarded" technology is never deployed. Limits on power limit the reach of advanced services on the copper plant and, accordingly deny consumers in less dense and rural

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[131] T1E1 Draft Guidelines at 13, ¶ 4.3.5.2. As pointed out in NorthPoint's opening Comments (at 45, nn. 74-75), these assumptions bear no relation to actual deployment numbers or configurations.

[132] See also T1E1 Draft Guidelines at 15, ¶ 5.2.3.3, which establish limitations on the reach of high-speed SDSL deployment based on an assumption that SDSL CPE, customer premises equipment or digital modems, are "co-located" at the end user address with high-speed ADSL modems. Such an assumption is necessary in order to generate a case of near-end crosstalk between the two technologies at the CPE end of the loop, even though *no* such actual cases of interference have ever been reported.

[133] Comments of NorthPoint at nn. 72, 74-75.

areas (where longer loops predominate) the benefits of innovation and investment offered by competitive LECs. [134]

Nothing in the comments submitted by the incumbents deny nor justify T1E1's attempts to pick "winner" and "loser" technologies, to enforce unneeded and restrictive "worst case" assumptions, or to deny consumers the benefit of innovative services that can reach users in less dense and rural areas. To the contrary, by failing to internalize the Commission's pro-competitive, pro-innovation and pro-consumer goals, and continuing instead to apply atavistic and unrealistically narrow rules that defeat the benefits of competition, T1E1 has demonstrated that it cannot and should not serve as the Commission's reference on national spectrum rules or policies.

B. The Commission Should Appoint an Advisory Committee Modeled on the North American Numbering Council to Oversee and Implement Spectrum Policy

In is opening comments, NorthPoint supported the Commission's suggestion that it look to the creation of the North American Numbering Council as the model to develop

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[134] The T1E1 Draft Guidelines at p. 12, ¶ 4.3.4.4 include the distance constraints on "unguarded" high-speed services.

> **4.3.4.4 Loop Reach Values**
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> In some instances, a particular DSL spectrum management class may need to reduce its expected loop reach in order to achieve and maintain spectral compatibility with one or more guarded systems. If this standard permits such a reduction for a particular DSL spectrum management class, it shall be explicitly stated for that class... *This standard does not, and shall not, permit a reduction in the loop reach of a guarded system.*

and implement longer term spectrum policy.[135] Given the disparate views and interpretations of the work of T1E1, the perils that attend an inconsistent or unresolved spectrum policy, and the fact that incumbent LECs are ignoring the "significant degrade" standard articulated by the Commission in the March 1999 order, it is imperative that the Commission act quickly to establish a neutral and nondiscriminatory body to develop, implement and enforce spectrum policy consistent with the Commission's pro-competitive, pro-innovation, and pro-consumer goals.

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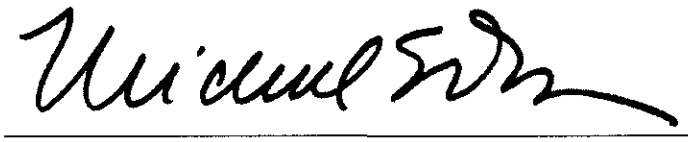
[135] Comments of NorthPoint at 46.

III. CONCLUSION

For the reasons stated, the Commission should implement two-carrier line sharing and implement a pro-competitive and nondiscriminatory spectrum policy to ensure that the benefits of competition and innovation envisioned by the Act are delivered to consumers.

DATED: JUNE 22, 1999 **RESPECTFULLY SUBMITTED,**



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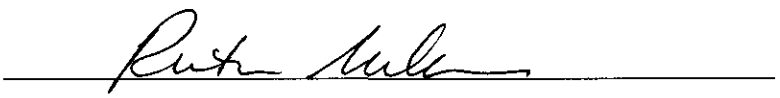

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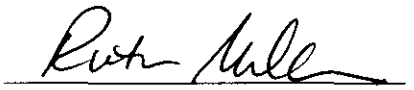
CERTIFICATE OF SERVICE

I, Ruth M. Milkman, do hereby certify that on this day of July 22, 1999, I caused a copy of the foregoing Reply Comments of NorthPoint Communications, Inc. to be served upon each of the parties listed on the attached Service List.



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